STATE OF MARYLAND

DHMH

Maryland Department of Health and Mental Hygiene
201 W. Preston Street • Baltimore, Maryland 21201
Martin O'Malley, Governor – Anthony G. Brown, Lt. Governor – Joshua M. Sharfstein, M.D., Secretary

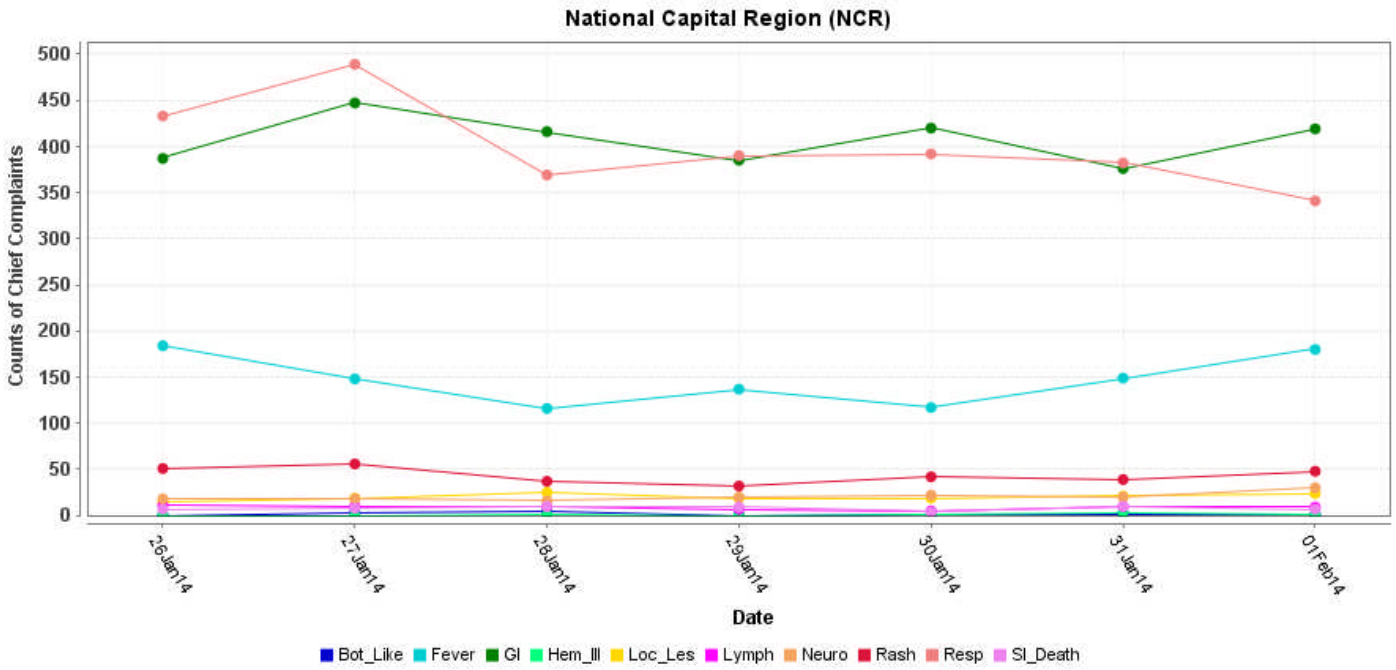
February 7, 2014

Public Health & Emergency Preparedness Bulletin: # 2014:05
Reporting for the week ending 02/01/14 (MMWR Week #05)

CURRENT HOMELAND SECURITY THREAT LEVELS

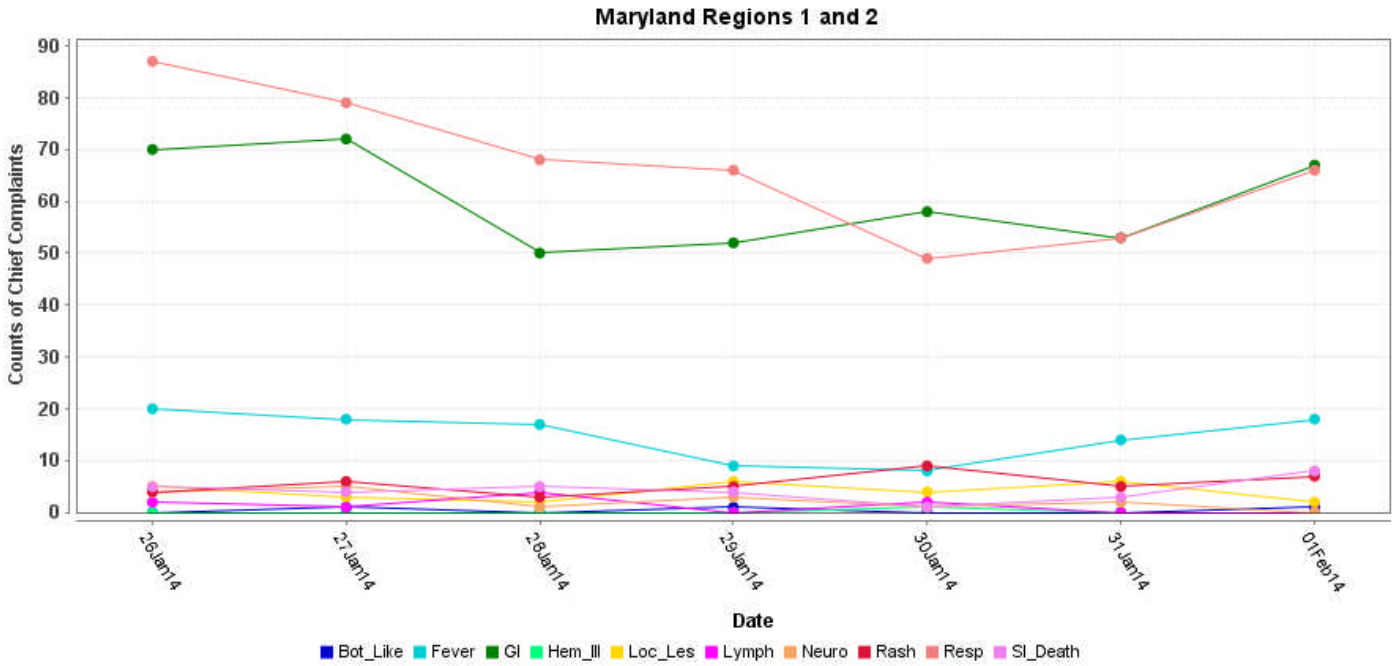
National: **No Active Alerts**
Maryland: **Level Four (MEMA status)**

SYNDROMIC SURVEILLANCE REPORTS
ESSENCE (Electronic Surveillance System for the Early Notification of Community-based Epidemics):
Graphical representation is provided for all syndromes, excluding the "Other" category, all age groups, and red alerts are circled. Red alerts are generated when observed count for a syndrome exceeds the 99% confidence interval. Note: ESSENCE – ANCR uses syndrome categories consistent with CDC definitions.
Overall, no suspicious patterns of illness were identified. Track backs to the health care facilities yielded no suspicious patterns of illness.

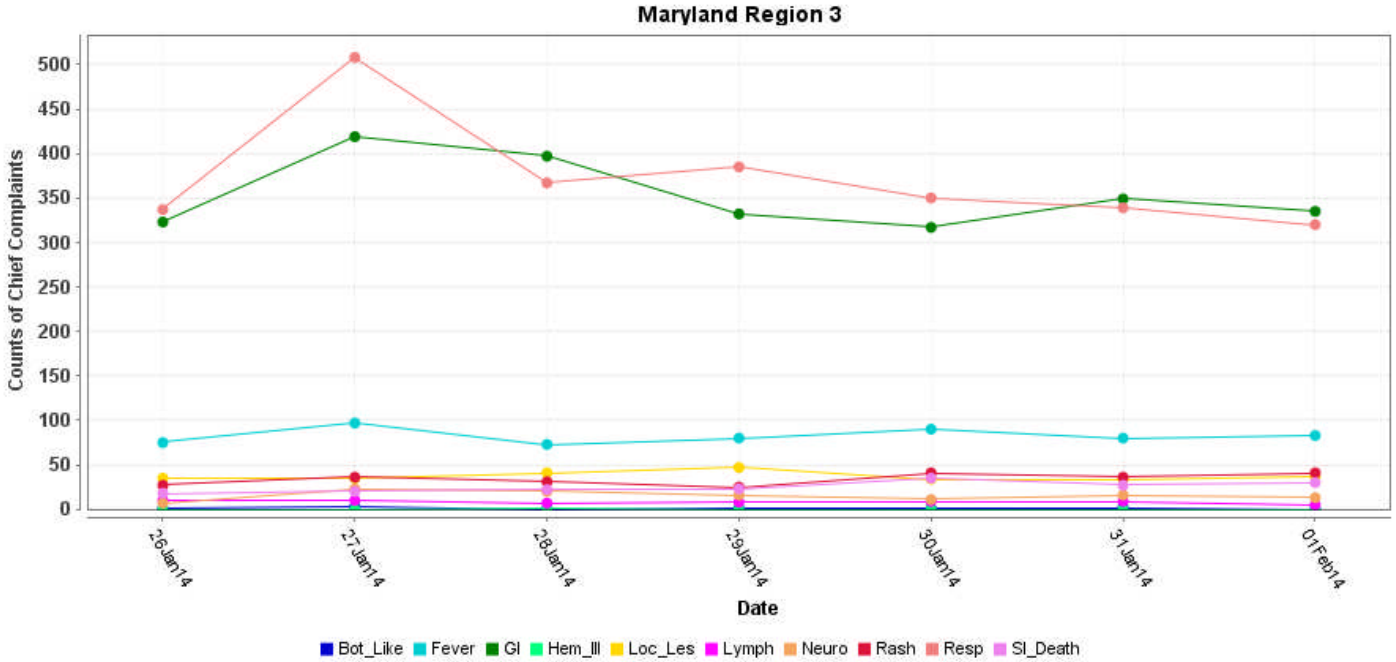


*Includes EDs in all jurisdictions in the NCR (MD, VA, and DC) reporting to ESSENCE

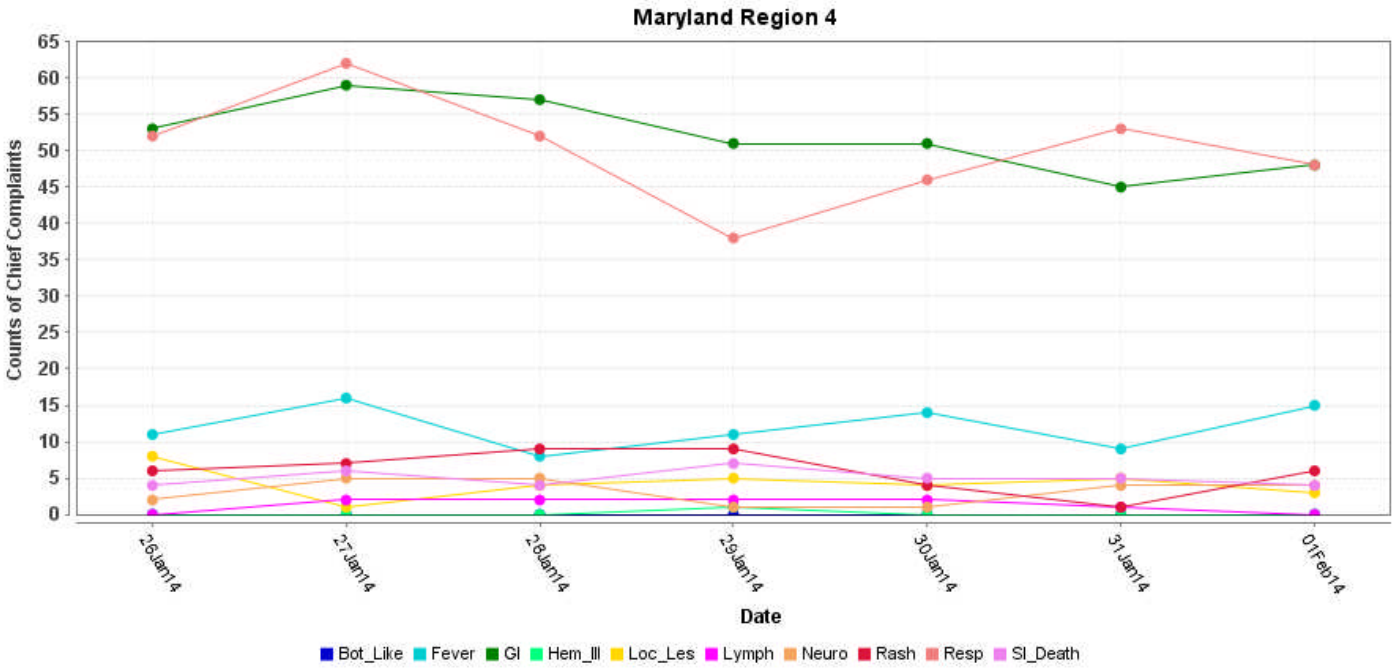
MARYLAND ESSENCE:



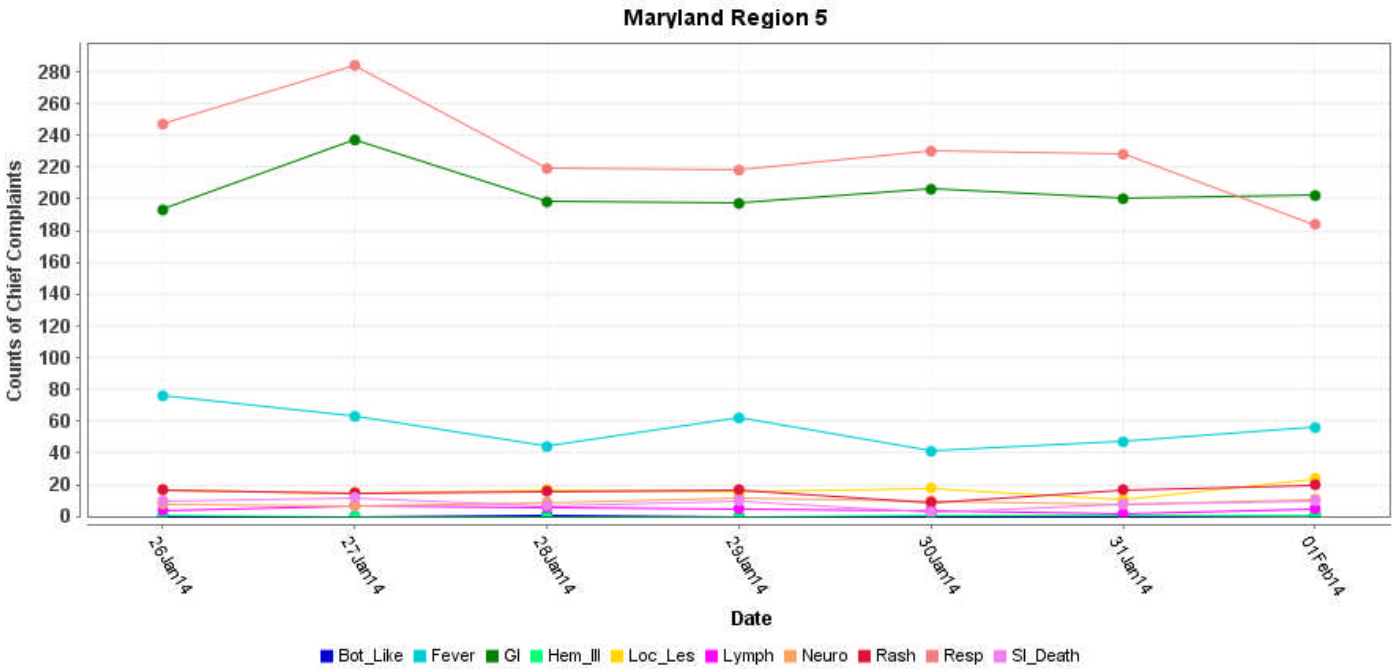
* Region 1 and 2 includes EDs in Allegany, Frederick, Garrett, and Washington counties reporting to ESSENCE



* Region 3 includes EDs in Anne Arundel, Baltimore City, Baltimore, Carroll, Harford, and Howard counties reporting to ESSENCE



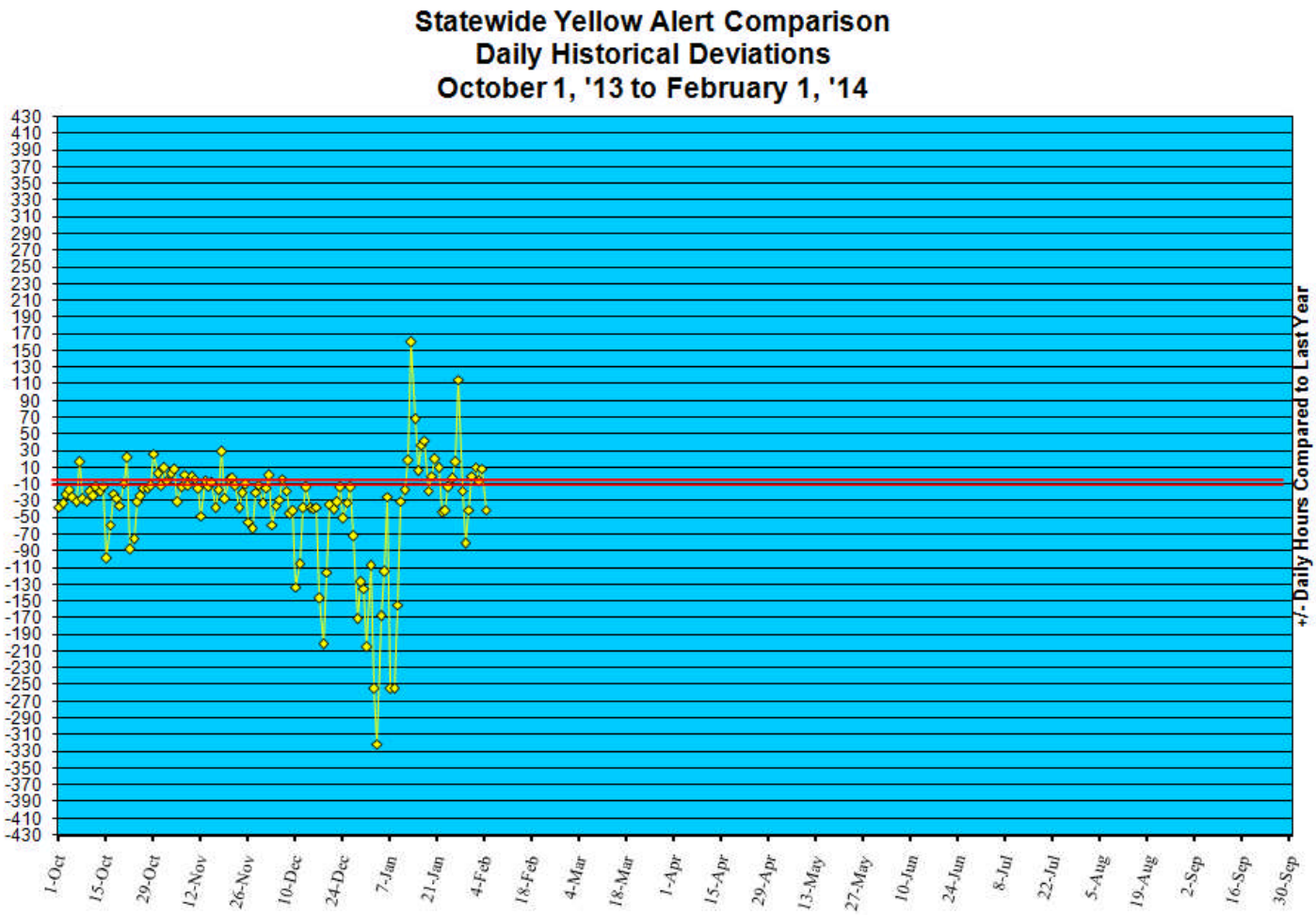
* Region 4 includes EDs in Cecil, Dorchester, Kent, Somerset, Talbot, Wicomico, and Worcester counties reporting to ESSENCE



* Region 5 includes EDs in Calvert, Charles, Montgomery, Prince George's, and St. Mary's counties reporting to ESSENCE

REVIEW OF EMERGENCY DEPARTMENT UTILIZATION

YELLOW ALERT TIMES (ED DIVERSION): The reporting period begins 10/01/13.



REVIEW OF MORTALITY REPORTS

Office of the Chief Medical Examiner: OCME reports no suspicious deaths related to an emerging public health threat for the week.

MARYLAND TOXIDROMIC SURVEILLANCE

Poison Control Surveillance Monthly Update: Investigations of the outliers and alerts observed by the Maryland Poison Center and National Capital Poison Center in December 2013 did not identify any cases of possible public health threats.

REVIEW OF MARYLAND DISEASE SURVEILLANCE FINDINGS

COMMUNICABLE DISEASE SURVEILLANCE CASE REPORTS (confirmed, probable and suspect):

Meningitis:	**Aseptic**	**Meningococcal**
New cases (January 26 - February 1, 2014):	3	0
Prior week (January 19 - January 25, 2014):	9	0
Week#05, 2013 (January 27 – February 2, 2013):	14	0

9 outbreaks were reported to DHMH during MMWR Week 05 (January 26 - February 1, 2014)

7 Gastroenteritis Outbreaks
3 outbreaks of GASTROENTERITIS in Nursing Homes
3 outbreaks of GASTROENTERITIS in Assisted Living Facilities
1 outbreak of GASTROENTERITIS associated with a school

2 Respiratory Illness Outbreaks
1 outbreak of INFLUENZA in a Nursing Home
1 outbreak of INFLUENZA in a Group Home

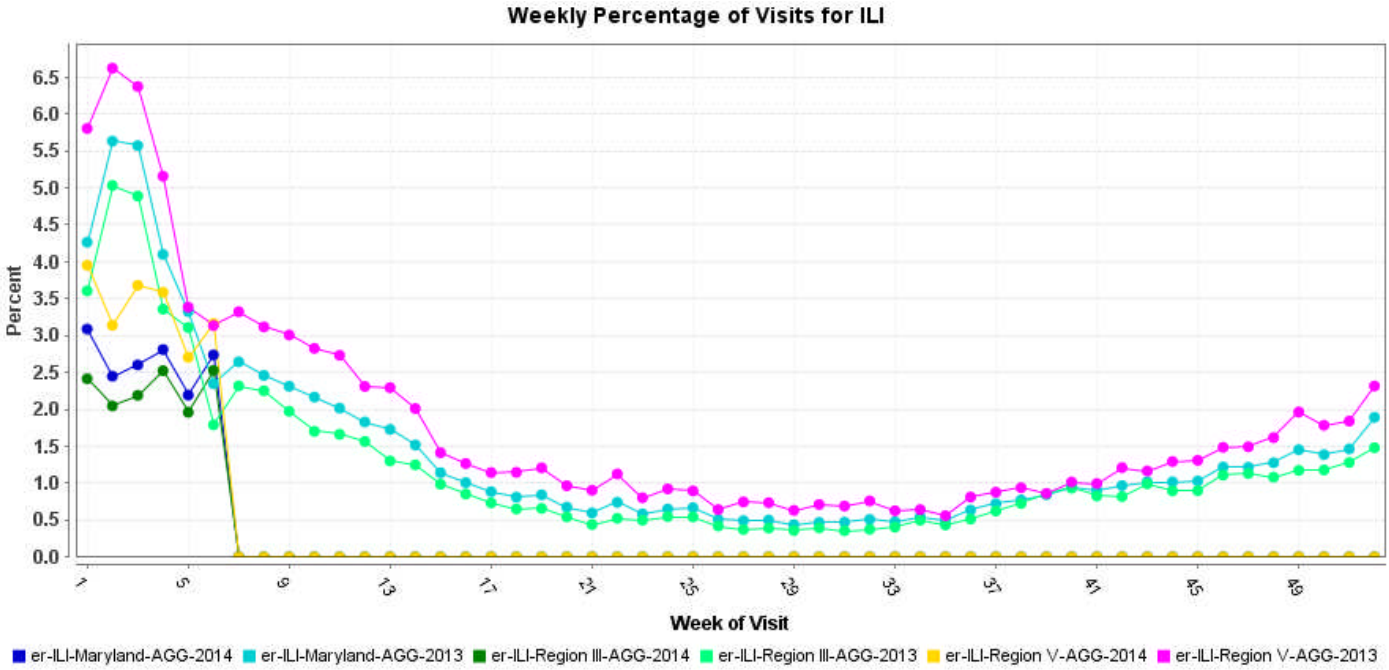
MARYLAND SEASONAL FLU STATUS

Seasonal Influenza reporting occurs October through May. Seasonal influenza activity for Week 5 was: Widespread with Minimal Intensity.

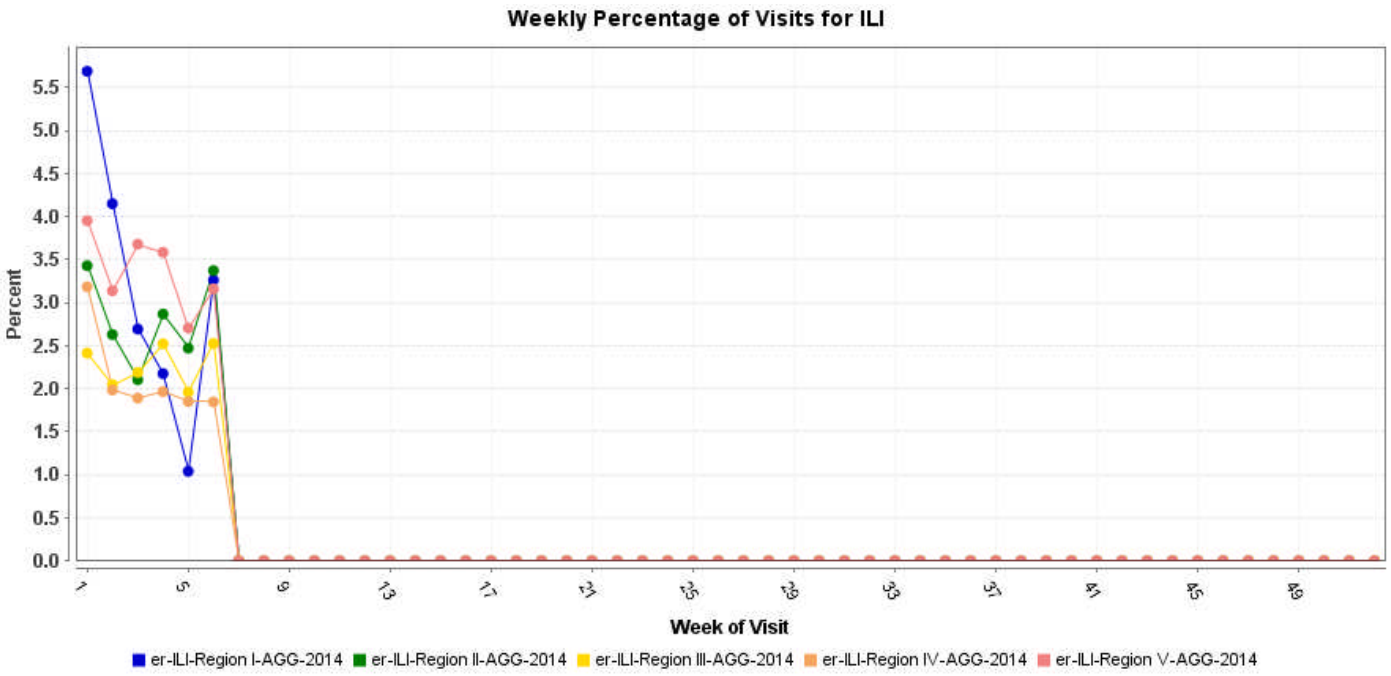
SYNDROMIC SURVEILLANCE FOR INFLUENZA-LIKE ILLNESS

Graphs show the percentage of total weekly Emergency Department patient chief complaints that have one or more ICD9 codes representing provider diagnoses of influenza-like illness. These graphs do not represent confirmed influenza.

Graphs show proportion of total weekly cases seen in a particular syndrome/subsyndrome over the total number of cases seen. Weeks run Sunday through Saturday and the last week shown may be artificially high or low depending on how much data is available for the week.



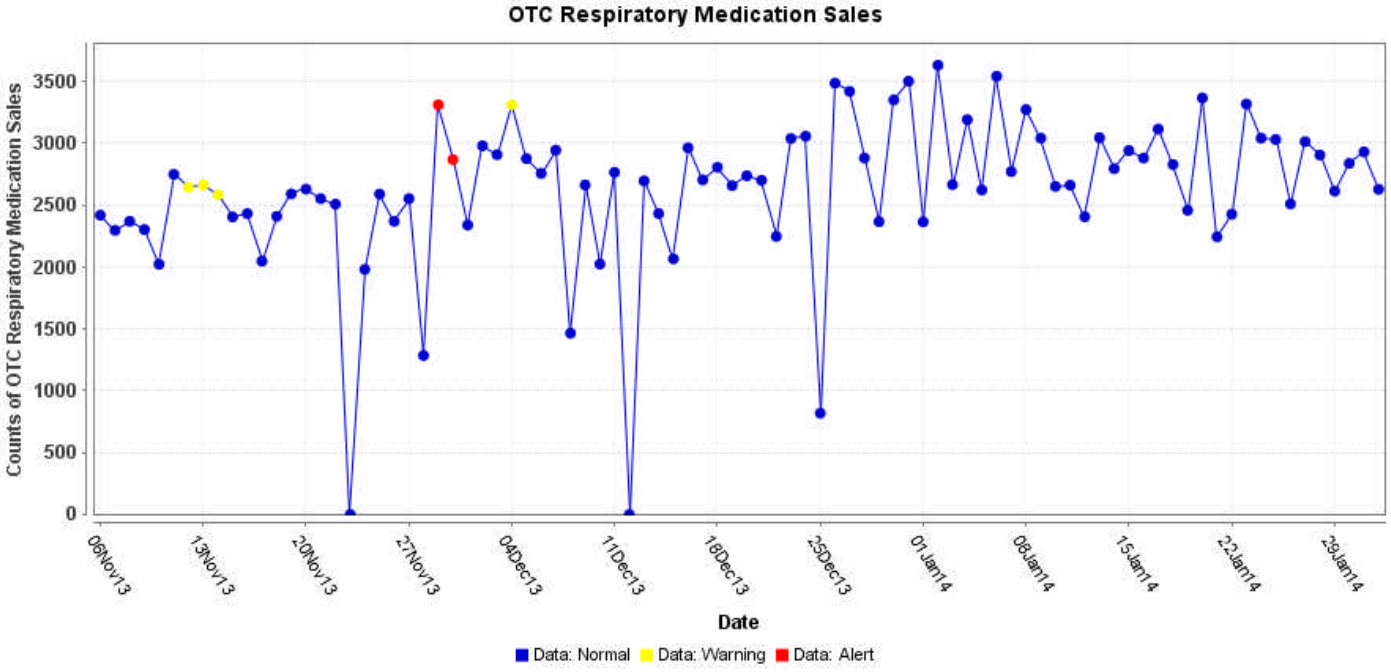
* Includes 2012 and 2013 Maryland ED visits for ILI in Metro Baltimore (Region 3), Maryland NCR (Region 5), and Maryland Total



*Includes 2013 Maryland ED visits for ILI in Region 1, 2, 3, 4, and 5

OVER-THE-COUNTER (OTC) SALES FOR RESPIRATORY MEDICATIONS:

Graph shows the daily number of over-the-counter respiratory medication sales in Maryland at a large pharmacy chain.



PANDEMIC INFLUENZA UPDATE / AVIAN INFLUENZA-RELATED REPORTS

WHO update: The current WHO phase of pandemic alert for avian influenza is ALERT. Currently, the avian influenza H5N1 virus continues to circulate in poultry in some countries, especially in Asia and northeast Africa. This virus continues to cause sporadic human infections with some instances of limited human-to-human transmission among very close contacts. There has been no sustained human-to-human or community-level transmission identified thus far.

Influenza A (H7N9) is one of a subgroup of influenza viruses that normally circulate among birds. Until recently, this virus had not been seen in people. However, human infections have now been detected. As yet, there is limited information about the scope of the disease the virus causes and about the source of exposure. The disease is of concern because most patients have been severely ill. There is no indication thus far that it can be transmitted between people, but both animal-to-human and human-to-human routes of transmission are being actively investigated.

Alert phase: This is the phase when influenza caused by a new subtype has been identified in humans. Increased vigilance and careful risk assessment, at local, national and global levels, are characteristic of this phase. If the risk assessments indicate that the new virus is not developing into a pandemic strain, a de-escalation of activities towards those in the interpandemic phase may occur. As of January 24, 2013, the WHO-confirmed global total of human cases of H5N1 avian influenza virus infection stands at 650, of which 386 have been fatal. Thus, the case fatality rate for human H5N1 is approximately 59%.

AVIAN INFLUENZA, HUMAN (H5N1): The 1st Vietnamese victim of the A/H5N1 avian flu has been identified as a person born in 1954, in Tan Long village, Thanh Binh district, Dong Thap province. Dong Thap Department of Health Vice Director Doan Tuan Buu said the patient was admitted to hospital suffering a high fever on 22 Jan 2014. She was transferred to An Giang Province General Hospital on 27 Jan 2014 but died on 28 Jan 2014. Her blood tested positive for A/H5N1. She recalled having contact with poultry before falling ill. After receiving the official blood test result, conducted by HCM City's Pasteur Institute, provincial medical and veterinary authorities immediately implemented quarantine measures to contain any contamination. The Pasteur Institute began coordinating with local authorities on 30 Jan 2014 to ensure the disease spreads no further.

AVIAN INFLUENZA, HUMAN (H7N9): A 49-year-old-man in Hangzhou City was confirmed on [20 Jan 2014] to have been infected with the virus. His wife and daughter who accompanied him to the hospital, were later confirmed to also have flu, according to the provincial health and family planning commission. The man has since died, his daughter is in a serious condition, and his wife is comfortable. Experts have reached no firm conclusion on how the virus spread between the family members. They all may have had contact with poultry, or the father may have transmitted the flu to his wife and daughter. Even if the case is confirmed as person-to-person transmission, there is no need to panic, said Li Lanjuan, an academician at the Chinese Academy of Engineering and a specialist in H7N9 prevention. "So far there have not been any cases in which one person transmits the flu to another, and the latter transmits the virus to a 3rd person," said Li. In this year's [2014] epidemic, transmission has been limited to a 2nd person, who does not transmit the virus to a 3rd. H7N9 is not likely to be spread in schools, workplaces, or at gatherings, said Chen Zhiping, deputy head of the provincial disease control and prevention center. The probability of continuous person-to-person transmission is very slim, said Feng Zijian, deputy head of the Chinese Center for Disease Control and Prevention. Three new human H7N9 cases were reported in Zhejiang on Wednesday [29 Jan 2014], bringing the number of infections in the province this year to 56. All 3 are in a critical condition. In neighboring Fujian Province, a 2-year-old child tested positive for bird flu, according to the provincial health commission. The patient is now recovering. South China's Guangxi Zhuang Autonomous Region also reported one new case on Wednesday [29 Jan 2014]. A 56-year-old woman showed flu symptoms for a week before she tested positive for bird flu and is now critical, according to local health authorities. It is the 1st human H7N9 case in the region. The National Health and Family Planning Commission said on Wednesday [29 Jan 2014] that live poultry markets would close if a case of H7N9 was detected. In places where no H7N9 cases have been reported, the commission suggested that live poultry markets be cleaned every day and disinfected once a week. Chicken has been a required dish on Chinese dining tables for centuries during Spring Festival, which begins this Friday [31 Jan 2014]. Chinese farmers have traditionally raised chickens using free range methods, especially in the countryside, which is seen by experts an additional risk. Live poultry trading has been halted in the cities of Hangzhou, Ningbo, and Jinhua in Zhejiang, with the most human H7N9 cases of any province. The province has launched emergency surveillance of poultry farms, parks, and migratory bird haunts, and has halted the flying of domestic pigeons.

NATIONAL DISEASE REPORTS*

CAMPYLOBACTERIOSIS (OREGON): 31 January 2013, Coos Bay Oyster Co. is recalling oysters over a food poisoning outbreak that has sickened at least 3 people in Oregon. The company, based in Charleston, said it is pulling all of its shucked oysters and in-shell oysters sold to retail stores and wholesalers in Oregon and California. The shucked oysters were sold in 1/2 gallon, quart, pint and half-pint containers with sell-by dates from 15 Jan 2014 to 17 Feb 2014. The containers carry the Coos Bay Oyster Co. label and are marked raw/ready-to-eat shucked oysters. The oysters in-shell were distributed in red onion sacks, each containing 5 dozen oysters of various sizes. They, too, have the company's label, with harvest dates from December 2013 to January 2014. The recall follows an outbreak of campylobacteriosis, one of the most common food-borne pathogens. Lab tests confirmed 3 illnesses traced to shucked oysters. All 3 patients were men, 50 to 75 years old, who consumed raw oysters between 15-20 Jan 2014, according to Oregon health officials. They said those who were sickened purchased the oysters from 2 markets in Lane and Coos counties. The markets were not identified. Two of the patients were hospitalized but are recovering, health officials said. The bacteria are killed by cooking. But many people prefer raw oysters. Only the shucked oysters have been confirmed to be part of the outbreak, the company said. Oregon officials, who don't know the source of the contamination, are continuing to investigate. (Food Safety Threats are listed in Category B on the CDC List of Critical Biological Agents) *Non-suspect case.

INTERNATIONAL DISEASE REPORTS*

E. COLI EHEC (SCOTLAND): 1 February 2014, Thousands of people were potentially exposed to an *E. coli* which has been linked to burgers sold at Glasgow's SSE Hydro arena. As reported in later editions of yesterday's [31 Jan 2014] Evening Times, there are 7 confirmed cases of *E. coli* O157. NHS Greater Glasgow and Clyde (NHSGGC) said an initial probe suggested a possible link with burgers sold at food outlets in the arena. The timeframe under investigation by the health board and Glasgow City Council's Environmental Health division -- 17-25 Jan 2014 -- includes shows by Top Gear, Del Amitri and Celtic Connections. The venue has a capacity of 12 000, meaning up to 84 000 people attended the Hydro in that period. All 7 people affected are

recovering at home; 1 of the cases is from the NHSGGC area, 2 are from Lanarkshire, 3 are from NHS Lothian and 1 is from Cumbria. Dr Gillian Penrice, consultant in Public Health Medicine at NHSGGC, said: "While there is no conclusive evidence, our initial investigations have indicated that there may be a link to the consumption of burgers at the SSE Hydro, and Glasgow City Council Environmental Health Officers are working closely with the vendors to ensure all appropriate food hygiene standards are being met. "I would ask anyone who has attended the Hydro recently and who has experienced or is experiencing symptoms including stomach cramps, diarrhea, nausea and fever to contact their GP." A spokesman for the Hydro said they wanted to assure the public they had "no significant concerns in relation to catering." She said: "We have been contacted by the Environmental Health in relation to an investigation into an _E. coli_ outbreak they believe may have been connected to one of the catering outlets on our premises. We are awaiting further details to establish the exact cause of this isolated incident. "The initial review of our caterers' standard procedures have been found satisfactory and Environmental Health have seen nothing in their processes which concerns them." (Food Safety Threats are listed in Category B on the CDC List of Critical Biological Agents) *Non-suspect case

National and International Disease Reports are retrieved from http://www.promedmail.org/.

OTHER RESOURCES AND ARTICLES OF INTEREST

More information concerning Public Health and Emergency Preparedness can be found at the Office of Preparedness and Response website: http://preparedness.dhmh.maryland.gov/ or follow us on Facebook at www.facebook.com/MarylandOPR.

Maryland's Resident Influenza Tracking System: http://dhmh.maryland.gov/flusurvey

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NOTE: This weekly review is a compilation of data from various surveillance systems, interpreted with a focus on a potential BT event. It is not meant to be inclusive of all epidemiology data available, nor is it meant to imply that every activity reported is a definitive BT event. International reports of outbreaks due to organisms on the CDC Critical Biological Agent list will also be reported. While not "secure", please handle this information in a professional manner. Please feel free to distribute within your organization, as you feel appropriate, to other professional staff involved in emergency preparedness and infection control.

For questions about the content of this review or if you have received this and do not wish to receive these weekly notices, please e-mail us. If you have information that is pertinent to this notification process, please send it to us to be included in the routine report.

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Syndrome Definitions for Diseases Associated with Critical Bioterrorism-associated Agents

Table: Text-based Syndrome Case Definitions and Associated Category A Conditions

Syndrome	Definition	Category A Condition
Botulism-like	ACUTE condition that may represent exposure to botulinum toxin ACUTE paralytic conditions consistent with botulism: cranial nerve VI (lateral rectus) palsy, ptosis, dilated pupils, decreased gag reflex, media rectus palsy. ACUTE descending motor paralysis (including muscles of respiration) ACUTE symptoms consistent with botulism: diplopia, dry mouth, dysphagia, difficulty focusing to a near point.	Botulism
Hemorrhagic Illness	SPECIFIC diagnosis of any virus that causes viral hemorrhagic fever (VHF): yellow fever, dengue, Rift Valley fever, Crimean-Congo HF, Kyasanur Forest disease, Omsk HF, Hantaan, Junin, Machupo, Lassa, Marburg, Ebola ACUTE condition with multiple organ involvement that may be consistent with exposure to any virus that causes VHF ACUTE blood abnormalities consistent with VHF: leukopenia, neutropenia, thrombocytopenia, decreased clotting factors, albuminuria	VHF
Lymphadenitis	ACUTE regional lymph node swelling and/ or infection (painful bubo- particularly in groin, axilla or neck)	Plague (Bubonic)
Localized Cutaneous Lesion	SPECIFIC diagnosis of localized cutaneous lesion/ ulcer consistent with cutaneous anthrax or tularemia ACUTE localized edema and/ or cutaneous lesion/ vesicle, ulcer, eschar that may be consistent with cutaneous anthrax or tularemia INCLUDES insect bites EXCLUDES any lesion disseminated over the body or generalized rash EXCLUDES diabetic ulcer and ulcer associated with peripheral vascular disease	Anthrax (cutaneous) Tularemia
Gastrointestinal	ACUTE infection of the upper and/ or lower gastrointestinal (GI) tract SPECIFIC diagnosis of acute GI distress such as Salmonella gastroenteritis ACUTE non-specific symptoms of GI distress such as nausea, vomiting, or diarrhea EXCLUDES any chronic conditions such as inflammatory bowel syndrome	Anthrax (gastrointestinal)

Syndrome Definitions for Diseases Associated with Critical Bioterrorism-associated Agents
(continued from previous page)

Syndrome	Definition	Category A Condition
Respiratory	ACUTE infection of the upper and/ or lower respiratory tract (from the oropharynx to the lungs, includes otitis media) SPECIFIC diagnosis of acute respiratory tract infection (RTI) such as pneumonia due to parainfluenza virus ACUTE non-specific diagnosis of RTI such as sinusitis, pharyngitis, laryngitis ACUTE non-specific symptoms of RTI such as cough, stridor, shortness of breath, throat pain EXCLUDES chronic conditions such as chronic bronchitis, asthma without acute exacerbation, chronic sinusitis, allergic conditions (Note: INCLUDE *acute exacerbation* of chronic illnesses.)	Anthrax (inhalational) Tularemia Plague (pneumonic)
Neurological	ACUTE neurological infection of the central nervous system (CNS) SPECIFIC diagnosis of acute CNS infection such as pneumoccocal meningitis, viral encephailitis ACUTE non-specific diagnosis of CNS infection such as meningitis not otherwise specified (NOS), encephailitis NOS, encephalopathy NOS ACUTE non-specific symptoms of CNS infection such as meningismus, delerium EXCLUDES any chronic, hereditary or degenerative conditions of the CNS such as obstructive hydrocephalus, Parkinson's, Alzheimer's	Not applicable
Rash	ACUTE condition that may present as consistent with smallpox (macules, papules, vesicles predominantly of face/arms/legs) SPECIFIC diagnosis of acute rash such as chicken pox in person > XX years of age (base age cut-off on data interpretation) or smallpox ACUTE non-specific diagnosis of rash compatible with infectious disease, such as viral exanthem EXCLUDES allergic or inflammatory skin conditions such as contact or seborrheaic dermatitis, rosacea EXCLUDES rash NOS, rash due to poison ivy, sunburn, and eczema	Smallpox
Specific Infection	ACUTE infection of known cause not covered in other syndrome groups, usually has more generalized symptoms (i.e., not just respiratory or gastrointestinal) INCLUDES septicemia from known bacteria INCLUDES other febrile illnesses such as scarlet fever	Not applicable

Syndrome Definitions for Diseases Associated with Critical Bioterrorism-associated Agents (continued from previous page)

Syndrome	Definition	Category A Condition
Fever	ACUTE potentially febrile illness of origin not specified INCLUDES fever and septicemia not otherwise specified INCLUDES unspecified viral illness even though unknown if fever is present EXCLUDE entry in this syndrome category if more specific diagnostic code is present allowing same patient visit to be categorized as respiratory, neurological or gastrointestinal illness syndrome	Not applicable
Severe Illness or Death potentially due to infectious disease	ACUTE onset of shock or coma from potentially infectious causes EXCLUDES shock from trauma INCLUDES SUDDEN death, death in emergency room, intrauterine deaths, fetal death, spontaneous abortion, and still births EXCLUDES induced fetal abortions, deaths of unknown cause, and unattended deaths	Not applicable

DEPARTMENT OF HEALTH AND HUMAN SERVICES
CENTERS FOR DISEASE CONTROL AND PREVENTION

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Web Site: www.dhmh.maryland.gov